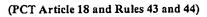
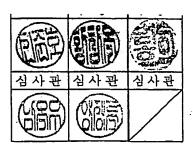


PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT





Applicant's or agent's file reference OPP040373KR	FOR FURTHER ACTION as we	see Form PCT/ISA/220 l as, where applicable, item 5 below.
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/KR2004/003444	24 DECEMBER 2004 (24.12.200	4) 26 DECEMBER 2003 (26.12.2003)
Applicant		
Electronics and Telecommunicat	ions Research Institute et al	
This International search report has been prep to Article 18. A copy is being transmitted to the		ity and is transmitted to the applicant according
This international search report consists of a t	otal of 3 sheets.	
It is also accompanied by a cop	oy of each prior art document cited in this re	oort
	ernational search was carried out on the bass otherwise indicated under this item.	sis of the international application in the
The international search this Authority (Rule 23.		of the international application furnished to
b. With regard to any nucleotide	and/or amino acid sequence disclosed in t	ne international application, see Box No. I.
2. Certain claims were found un	isearchable (See Box No. II)	
3. Unity of invention is lacking	(See Box No. III)	
4. With regard to the title,		
the text is approved as submitted	ed by the applicant.	
the text has been established by	y this Authority to read as follows:	
		_
		·
5. With regard to the abstract,	•	
the text is approved as submitted	ed by the applicant.	•
	according to Rule 38.2(b), by this Authority	as it appears in Box No. IV. The applicant
	- · · · · ·	report, submit comments to this Authority.
6. With regard to the drawings,		
_	blished with the abstract is Figure No.	9
as suggested by the appli		
because the applicant faile		•
	characterizes the invention.	
b. none of the figure is to be publ		,

International application No. PCT/KR2004/003444

A. CLASSIFICATION OF SUBJECT MATTER

IPC7 H04B 7/26

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7 H04B 7/26

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched KR: IPC as above

Electronic data base consulted during the intertnational search (name of data base and, where practicable, search terms used) KIPASS, DELPHION, ESPACENET & Keywords: wireless, broadband, power, save, sleep, group and similar terms

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6622251 B1 (TELEFONAKTIEBOLAGET LM ERICSSON) 16 September 2003 * the whole document *	1 - 21
Α	Carla-Fabiana Chiasserini; Ramesh R. Rao,; "Improving energy saving in wireless systems by using dynamic power management"; Wireless Communications, IEEE Transactions on, Volume: 2, Issue: 5, September 2003, * pages 1090-1100 *	1 - 21
A	US 5625882 A1 (MOTOROLA, INC.) 29 April 1997 * the whole document *	1 - 21
Α	US 6438375 B1 (TELEFONAKTIEBOLAGET LM ERICSSON) 20 August 2002 * the whole document *	1 - 21
Α	WO 96/19084 A1 (TELEFONAKTIEBOLAGET LM ERICSSON) 20 June 1996 * the whole document *	1 - 21
P, X	"Enhancement on Sleep Mode Operation by Grouping": IEEE C802.16e-04/05r1, 15 January 2004 <retrieved from="" internet="" the=""> - CURL: http://www.ieee802.org/16/tge/contrib/C80216e-04_05r1.pdf></retrieved>	1 - 21

Further	documents	are list	ed in 1	the cor	itinuation	of Box C.	
 							_

See patent family annex.

- Special categories of cited documents:
- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier application or patent but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed
- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of mailing of the international search report

Date of the actual completion of the international search
18 MARCH 2005 (18.03.2005)

19 MARCH 2005 (19.03.2005)

Name and mailing address of the ISA/KR

Korean Intellectual 920 Dunsan-dong, Republic of Korea
Facsimile No. 82-42-472-7140

Korean Intellectual Property Office 920 Dunsan-dong, Seo-gu, Daejeon 302-701, Republic of Korea Authorized officer

SHIN, Jun Ho

Telephone No. 82-42-481-8129



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR2004/003444

	Patent document cited in search report	Publication date		Patent family member(s)	Publication date
US	6622251 B1	16-09-2003	AU	771981 B2	08-04-2004
			AU	4159500 A	23-10-2000
			AU	4293701 A	24-09-2001
			CA	2369049 A1	12-10-2000
			CN	1354939 A	19 - 06-2002
			EP	1169818 A1	09-01-2002
			JP :	2002541731 T	03-12-2002
			WO	0060811 A1	12-10-2000
			WO	0169859 A1	20-09-2001
US	5625882 A	29-04-1997	NON	E	
US	6438375 B1	20-08-2002	AU	3686600 A	. 21–09–2000
			CA	2365616 A1	08-09-2000
			CN	1349725 A	15-05-2002
			EP	1157579 A1	28-11-2001
			JP	2002538744 A	12-11-2002
			TW	493356 B	01-07-2002
			WO	0052948 A1	08-09-2000
WO	9619084 A1	20-06-1996	AU	4320096 A	03-07-1996
		·	CN	1175339 A	04-03-1998
			EP	0797899 A1	01-10-1997
			JP	10510961T T	20-10-1998
			US	5745860 A	28-04-1998